

CLAIMS:

1. A parallel optical transceiver package assembly tool for integration of an optoelectronic device with a parallel optical transceiver package, said tool comprising:
a clamp base;
a rocker plate clamp frame pivotally connected to the clamp base, the rocker plate clamp frame having a mounting recess adapted to receive the optoelectronic device; and
a rocker plate pivotally connected to the rocker plate clamp frame for positioning the optoelectronic device.
2. The parallel optical transceiver package assembly tool of claim 1 wherein the clamp base includes a projecting clamp support, said projecting clamp support disposed for insertion into a MT connector port defined by the parallel optical transceiver package.
3. The parallel optical transceiver package assembly tool of claim 1 wherein the rocker plate further comprises a plurality of resilient members.
4. The parallel optical transceiver package assembly tool of claim 3 wherein the plurality of resilient members includes a first resilient member, wherein said first resilient member rotatably biases a first end of the rocker plate such that a second end of the rocker plate is in proximity to the mounting recess.
5. The parallel optical transceiver package assembly tool of claim 3 wherein the plurality of resilient members includes a second resilient member and a third resilient member

mounted in proximity to the second end such that the second resilient member frictionally retains the optoelectronic device within the mounting recess while the third resilient member promotes substantially parallel physical contact between a flexible circuit of the optoelectronic device and the parallel optical transceiver package.

6. The parallel optical transceiver package assembly tool of claim 1 wherein the rocker plate clamp frame is fixed to the clamp base by a single fastener.

7. The parallel optical transceiver package assembly tool of claim 1 wherein the rocker plate is pivotally connected to the rocker plate clamp frame by a pair of fasteners in a planar arrangement promoting a rocking motion about the axis.

8. The parallel optical transceiver package assembly tool of claim 1 wherein the optoelectronic device is a vertical cavity surface emitting laser.

9. A method of integrating an optoelectronic device into a parallel optical transceiver package, said method comprising:

clamping the optoelectronic device to an assembly tool;

positioning the assembly tool above an electronic substrate of the parallel optical transceiver package;

clamping the assembly tool to a package frame of the parallel optical transceiver package;

curing an adhesive to the optoelectronic device; and

attaching the optoelectronic device to the electronic substrate.

10. The method of claim 9 wherein the assembly tool includes a clamp base and a mounting frame pivotally connected so as to straddle a package frame side of the parallel optical transceiver package.

11. The method of claim 10 wherein the mounting frame includes a rocker plate disposed distally from the clamp base.

12. The method of claim 11 wherein clamping the optoelectronic device includes accessing a mounting recess defined by the assembly tool, said access created by depressing a first end of a rocker plate so that an opposing second end of the rocker plate is deflected from the mounting recess.

13. The method of claim 12 wherein the optoelectronic device is then positioned within the mounting recess, said optoelectronic device including a coupled flexible circuit that extends distally from the mounting recess.

14. The method of claim 13 wherein the first end of the rocker plate is released so that the opposing second end of the rocker plate clamps the optoelectronic device to the assembly tool.

15. The method of claim 14 wherein the second end of the rocker plate includes at least a single resilient protrusion for contacting the optoelectronic device.

16. The method of claim 14 wherein the second end of the rocker plate includes at least a single resilient protrusion for contacting the optoelectronic device.

17. The method of claim 11 wherein the assembly tool is positioned relative to the parallel optical transceiver package by aligning a projecting member of the assembly tool with a connector port on the parallel optical transceiver package.

18. The method of claim 14 wherein clamping the assembly tool to the parallel optical transceiver package is by advancing a fastener which projects from the clamp base to the mounting frame.

19. An optoelectronic device integration tool for connecting an optoelectronic device to an electronic substrate of a parallel optical transceiver package, the tool comprising:

means for retaining the optoelectronic device within a mounting frame;

means for securing the optoelectronic device to the parallel optical transceiver packages; and

means for securing the optoelectronic device against the electronic substrate during the connection process.